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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,240

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Dietmar Kaiser

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EXAMINER

STELLING, LUCAS A

ART UNIT

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1797

NOTIFICATION DATE

DELIVERY MODE

01/21/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/560,240	Applicant(s) KAISER, DIETMAR	
	Examiner Lucas Stelling	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-15, 18, 19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-15, 18, 19, and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1, 3, 8, 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,946,767 to Sinz ("Sinz").

3. As to claim 1, Sinz teaches a water treatment arrangement comprising:

a separating device **(13, with associated filters and separators, See in Fig. 1)**,

a water tank which is connected to the separation device, characterized in that the separation device and the water tank form a structural unit and the separation device is surrounded at least in areas by the water tank **(See 14 and 13 in Fig. 1)**, and

a four-way valve for controlling air flows into and out of the separation device and the water tank, wherein in a first position of the valve the valve connects an outlet opening of the separation device with an outlet of the valve, and in a second position of the valve the valve connects an outflow opening of the water tank with the outlet opening of the separation device **(See Fig. 3 and see col. 9 lines 24 -- col. 10 lines 10)**.

4. As to claim 3, Sinz teaches the arrangement of claim 1, and in Sinz the mud will collect in the mud tank **(See 13 in Sinz)**.

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5. As to claim 8, Sinz teaches the arrangement of claim 1, and in Sinz the water tank is provided with an outlet to supply the vacuum device with water **(See 70 in Fig. 3)**.

6. As to claim 11, Sinz teaches the arrangement of claim 1, and is provided on a vehicle which is capable of cleaning sewers **(See in the Figures)**.

7. As to claim 14, Sinz teaches the arrangement of claim 8, and uses a liquid ring pump **(See col. 9 lines 10-20)**.

8. Claim 15, 19, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by CH 630684 to Widenmann ("Widenmann").

9. As to claim 15, Widenmann teaches a water treatment arrangement, comprising:
a separation device having an interior, a base, one inlet for sludge to be separated and an outlet for connection to a vacuum pump **(See 1 in the Figures, 50 is an inlet and 32/24 is an outlet connected to a vacuum pump)**; and
a water tank which is connected to the separation device **(See 11 in the Figures)**;

wherein the separation device and the water tank form a structural unit in which the separation device for the sludge mixture is surrounded at least in areas by the water tank for the cleaned water **(See Figs. 1 and 2, the separation device and water tank are connected together on the back of a truck and the water tank partially surrounds the separation device)**, and

wherein the interior of the separation device between the inlet and the outlet of the separation device is received in the water tank (**See Fig. 2**) to thereby form a first reservoir for settled mud (**See 1A in Fig 3**) on the base of the separation device and a second reservoir for clean water in the water tank (**See 11 in the Figures**), with a wall between the first and second reservoirs (**See in the Figures the bottom of the separation device is separated from the top of the water tank by walls of each**).

10. As to claim 19, Widenmann teaches the apparatus of claim 15, and in Widenmann the water tank surrounds the bottom portion of the separation device so that the separation device will be surrounded on both sides with water (**See Widenmann in the Figs. especially 1 and 3**).

11. As to claim 21, Widenmann teaches the apparatus of claim 15, and Widenmann teaches a water separator in one section of the water tank (**See Widenmann 101 in Fig 5**).

12. As to claim 22, Widenmann teaches the apparatus of claim 15, and the treatment apparatus is used on a vehicle and is capable of cleaning sewers (**See Widenmann in the Figures**).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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14. Claims 1-8, 11-14, 18, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over CH 630684 to Widenmann in view of U.S. Patent No. 5,946,767 to Sinz ("Sinz").

15. As to claim 1, Widenmann teaches water treatment arrangement comprising:

a separation device **(Widenmann 1)**,

a water tank **(Widenmann 11)** for cleaned water which is connected to the separation device **(See 20 in the Figures)**, characterized in that the separation device and the water tank form a structural unit and the separation device is surrounded at least in areas by the water tank for the cleaned water **(See Fig. 2, the water tank and the separating device are attached to the back of a truck)**; and

a four-way valve wherein in the first position of the valve, the valve connects an outlet opening of the separation device with an outlet of the valve **(See 24, 29, 30, and 31 in Fig. 5 and see Widenmann English translation page 3, in the paragraph beginning "The suction line 3..."where the 4-way valve connects an outlet of the separating device with the discharge 31)**.

Widenmann is different from claim 1 in that Widenmann does not contemplate that in the second position the valve connects an opening of the water tank with an opening of the separation device. Sinz teaches a sludge tank and a water tank which are connected **(See in the Figs, and see Fig. 3)**. Sinz provides that in a first position of the valve the sludge tank is open to the atmosphere **(See Sinz position 62)** and that in another position of the valve, the valve connects the outflow opening of the water tank with the outlet opening of the sludge tank **(See Sinz at least position 63)**. Sinz

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explains that the four way valve allows for a vacuum mode, neutral mode, and pressurization mode, thereby coordinating the actions of the pump, sludge tank and water-in-use tank for the differing modes **(See Sinz col. 9 lines 24 -- col. 10 lines 10)**.

Therefore, it would have been obvious to a person having ordinary skill in the art to configure the four way valve in Widenmann to provide for connecting the outflow opening of the water tank with the outflow opening of the sludge in a second position and connecting the sludge tank with an outlet of the valve in order to coordinate the actions of the pump, sludge tank, and water-in-use tank for providing a vacuum mode, neutral mode, and pressurization mode.

16. As to claim 2, Widenmann and Sinz teach the apparatus of claim 1, and in Widenmann the separation device and the water tank are arranged with the water tank partly concentrically located around the sludge tank **(See Widenmann Fig. 2)**.

17. As to claim 3, Widenmann and Sinz teach the apparatus of claim 1, and in Widenmann the separator comprises a mud separator with a reservoir for settled mud **(See 1a in the Figures, and see 1A in the bridging paragraph of pages 3 and 4 in the English translation)**.

18. As to claim 4, Widenmann and Sinz teach the apparatus of claim 1, and in Widenmann, the sludge separation device penetrates lengthwise along the water tank thereby penetrating it along a lengthwise axis of the water tank **(See Widenmann Figs. 1 and 2)**.

19. As to claim 5, Widenmann and Sinz teach the apparatus of claim 4, and Widenmann contemplates that the separating tank can tilt **(See in Fig. 1)**. Widenmann

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also contemplates that the inlet for the sludge is located toward the back-end of the tank and the outlet for air is located toward the front, making it at an operatively higher position from the inlet for the sludge **(See 24 and 50 in Fig. 1)**.

20. As to claim 6, Widenmann and Sinz teach the apparatus of claim 1, and Widenmann teaches a water separator in one section of the water tank **(See Widenmann 101 in Fig 5)**.

21. As to claim 7, Widenmann and Sinz teach the apparatus of claim 6, and Widenmann provides that the water separator is a cyclone **(See 101 in Fig 5, and in the English translation on page 4 in the line beginning “The cyclone 101”)**.

22. As to claim 8, Widenmann and Sinz teach the apparatus of claim 1, and Sinz teaches using a water ring pump which is supplied with water from a water tank **(See Sinz 21 in Fig. 3)**, but Widenmann does not. Sinz explains that liquid ring pumps are quite, suffer from low wear, and have no moving seals **(See Sinz col. 8 lines 1-10)**.

Therefore, the use of a liquid ring pump which draws water would have been obvious to a person having ordinary skill in the art, in order to provide a quite vacuum pump with low wear.

23. As to claim 11, Widenmann and Sinz teach the apparatus of claim 1, and both are used on vehicles and are capable of cleaning sewers **(See Widenmann and Sinz in the Figures)**.

24. As to claim 12, Widenmann and Sinz teach the apparatus of claim 11, and in Widenmann the water tank and separating device are in a stacked vertical arrangement **(See Widenmann in the Figures)**, and in Widenmann the mud tank, which is the back

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part of the water separating device, appears horizontally arranged with respect to the cab (**See Widenmann cf. 1A in Fig 3, and 1 in Fig 1**). In Widenmann the vacuum pumps are also located next to the stacked arrangement of water tank and separating device (**See 22 and 23 next to 11 and 1 in Fig 1**).

25. As to claim 13, Widenmann and Sinz teach the apparatus of claim 12, and in Widenmann the water treatment arrangement maintains its position on the back of the bed when the separating device having a mud tank is tipped (**See Widenmann Fig. 1**).

26. As to claim 14, Widenmann and Sinz teach the apparatus of claim 8, and Sinz uses a liquid ring pump (**See Sinz col. 9 lines 15-20**)

27. As to claim 18, Widenmann and Sinz teach the apparatus of claim 1, and in Widenmann the water tank surrounds the bottom portion of the separation device so that the separation device will be surrounded on both sides with water (**See Widenmann in the Figs. especially 1 and 3**).

28. As to claims 23 and 24, Widenmann teaches the apparatus of claim 22, and comprises a vacuum device having an inlet and an outlet, wherein the outlet of the separation device is connected to the inlet of the vacuum device (**See 24 and 23 in the Figures**); but, with respect to claim 23, Widenmann does not contemplate that the vacuum device is connected to the inflow opening of the water tank. With respect to claim 24, although Widenmann contemplates a four-way valve which connects with the outlet of the separation device, the respective connections made by the valve recited in claim 24 are not contemplated.

.Sinz teaches a sludge tank and a water tank which are connected (**See in the Figs, and see Fig. 3**). Sinz provides that in a first position of the valve that the outlet of the separation device and an inlet of the vacuum device are connected with the water tank (**See Sinz position 61**) and that in another position of the valve, the valve connects the inflow of the vacuum device to the atmosphere and the outlet to the sludge/separation device via the inflow and outflow openings of the water tank (**See Sinz at least position 63**). Sinz explains that the four way valve allows for a vacuum mode, neutral mode, and pressurization mode, thereby coordinating the actions of the vacuum pump, sludge tank and water-in-use tank for the differing modes (**See Sinz col. 9 lines 24 -- col. 10 lines 10**). Therefore, with respect to claims 23 and 24 it would have been obvious to a person having ordinary skill in the art to configure the four way valve in Widenmann to provide for connecting the sludge tank to the inlet of the vacuum, and with the outlet of the vacuum provided to the water tank in a first position, and the inlet of the vacuum to atmospheric and the outflow to the sludge tank via the water tank in a second in order to coordinate the actions of the pump, sludge tank, and water-in-use tank for providing a vacuum mode, neutral mode, and pressurization mode.

29. As to claim 25, Widenmann and Sinz teach the apparatus of claim 25, and in Sinz the vacuum device is a liquid ring pump (**See Sinz col. 9 lines 15-20**).

30. As to claim 26, Widenmann and Sinz teach the apparatus of claim 25, and Sinz contemplates taking the water from a water tank to provide for the liquid for the liquid ring pump (**See Sinz col. 9 lines 10-20**), but Sinz does not contemplate using the water

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in the cleaned water tank, as a separate tank is provided (**See 14 and 15 in the Figures**). However, a person having ordinary skill in the art would recognize that using the cleaned water in the cleaned water tank, obviates the need to provide a second water tank simply for supplying the liquid ring pump as cleaned filter water is located in the water supply tank in Sinz (**See Sinz col. 4 lines 60-68**), thereby simplifying construction of the device. Therefore, it would have been obvious to a person having ordinary skill in the art, in view of Widenmann and Sinz, to draw water from the cleaned water tank in order to run the liquid ring pump as the cleaned water tank provides an available supply of water, and obviates the need for another tank solely for the purpose of supplying water to the liquid ring pump. See also MPEP 2144.04(II)(A).

Response to Arguments

31. Applicant's arguments with respect to claims 1 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Stelling whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Thursday 12:00PM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

las 1-13-10

/Matthew O Savage/
Primary Examiner, Art Unit 1797

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